

Other species: *C. sungorus*. (*Mus sungorus*, Pall.)

Although *C. sungorus* was known so much the earlier, it is only represented in the material available to me by a single dried skin, in which the characters are not very clearly discernible. With both skins, skulls, and a spirit-specimen of *C. campbelli* for examination, I therefore think it advisable to make that species the genotype.

The position of Satunin's *Cricetulus roborovskii* is not clear, as his expression "Die Sohlen sind dicht mit weissem Haar bekleidet" is applicable either to a *Phodopus* or a *Cricetiscus*.

XLV.—*Descriptions of New Pyralidæ of the Subfamilies Hydrocampinæ, Scoparianæ, &c.* By Sir GEORGE F. HAMPSON, Bart., F.Z.S., &c.

[Continued from p. 376.]

(1 i) *Cataclysta nyasalis*, sp. n.

Head, thorax, and abdomen white mixed with dark brown with a cupreous gloss; antennæ brown ringed with white; palpi white, black-brown above; fore and hind femora and tibiæ black-brown above; claspers of male yellowish. Fore wing with the base white, brown at costa; an inwardly oblique orange-yellow antemedial band from cell to inner margin, defined by brown lines and with white beyond the outer line; the medial area white very thickly irrorated with dark cupreous brown; postmedial line white, slightly incurved below vein 3 and ending at tornus, an orange-yellow band beyond it from below costa to vein 3; the terminal area brown with a white line from costa before apex to termen at vein 4, an orange-yellow band beyond it on termen from apex to discal fold; cilia dark brown with some white at tips. Hind wing white, very thickly irrorated with dark cupreous brown from near base to the subterminal line, which is black-brown defined on each side by white, slightly incurved below vein 2; five partly conjoined ocellate black spots on termen from below apex to above tornus, with metallic silvery points between them, the anal spot larger with the silvery point in its centre, some orange-yellow points beyond them on termen; cilia cupreous brown at base, white slightly tinged with brown at tips.

Hab. BR. C. AFRICA, Mt. Mlanje (*Neave*), 3 ♂, 1 ♀ type.
Exp. 10 mm.

(2 a) *Cataclysta atriterminalis*, sp. n.

♀. Head, thorax, and abdomen pale ochreous mixed with some silvery white; palpi with the 3rd joint brownish; pectus, legs, and ventral surface of abdomen white. Fore wing white, the costal area brownish ochreous; an inwardly oblique orange-yellow ante-medial band from discal fold to inner margin, defined by brownish lines; a short orange-yellow fascia beyond the cell; brownish subterminal spots at veins 6 and 2 and above tornus. Hind wing white; an oblique orange-yellow medial band edged by brownish lines, the yellow extending on inner margin to near tornus; the terminal area broadly black with some whitish scales and some orange scales on termen.

Hab. CELEBES, Saugir I. (*Doherty*), 1 ♀ type. *Exp.* 10 mm.

(47 a) *Cataclysta obliquifascia*, sp. n.

♀. Head and thorax fulvous yellow mixed with grey-brown; abdomen brownish white, dorsally tinged with ochreous yellow except towards base and with dark brown segmental lines; antennæ dark brown except at base; palpi yellowish, the 3rd joint dark brown; pectus, legs, and ventral surface of abdomen white tinged with brown, the fore femora towards extremities, the tibiæ and tarsi dark brown, the tibiæ banded with yellowish, the mid tibiæ with dark brown stripe above, the tarsi ringed with dark brown. Fore wing fulvous yellow; small subbasal and antemedial brown spots on costa and slight brown marks on inner margin before and at middle; an obliquely curved reddish-brown fascia from costa before apex to middle of discocellular, with a whitish fascia below it; an oblique rather diffused reddish-brown line from before termen at discal fold to inner margin before tornus, with some whitish beyond it; a fulvous-yellow terminal band defined on inner side by a reddish-brown line; cilia white at base, brown at tips. Hind wing golden yellow, the costal area to below the cell and to beyond middle white; an oblique dark brown medial band from cell to inner margin, and a rather diffused oblique postmedial line from vein 4 to inner margin; an incurved subterminal brown line from costa to discal fold; a series of small black-brown spots before termen from below apex to vein 2, some metallic silver beyond them on termen; cilia yellow at base, with black line at middle, the tips white tinged with brown.

Hab. BRAZIL, Pernambuco (*Swale*), 1 ♀ type. *Exp.* 16 mm.

(51) *Cataclysta chionostola*, sp. n.

♀. Head and thorax white slightly tinged with rufous; abdomen white; antennæ brownish except towards base; pectus, legs, and ventral surface of abdomen white, the fore legs slightly tinged with rufous and the tibiæ with black-brown streak below. Fore

wing silvery white; two cupreous-brown points at base; ante-medial line cupreous brown, oblique to above vein 1, then inwardly oblique, a patch of pale yellow before it below the cell; a very oblique cupreous-brown line from middle of costa to below submedian fold well beyond middle, then recurved to inner margin, an oblique striga beyond it in end of cell and another beyond the cell, with a yellowish tinge between them; a triangular postmedial patch of the ground-colour from costa to below vein 4, defined at sides by yellow-brown lines; two cupreous-brown subterminal lines with a yellowish tinge between them, from just below costa to just above inner margin, incurved below vein 3; a cupreous-brown line before termen. Hind wing silvery white; a faint yellow and brown tinge in and below middle of cell; a straight oblique cupreous-brown medial line; postmedial line cupreous brown, incurved between veins 6 and 2; two cupreous-brown subterminal lines with a yellowish tinge between them, the inner line slightly incurved between veins 6 and 2, the outer angled outwards at vein 6, then slightly waved and joining the inner line at submedian fold; a cupreous-brown subapical striga and a line before termen from the angle of the outer subterminal line to vein 2.

Hab. PERT, Rio Pacaya, 1 ♀ type. *Exp.* 18 mm.

(4 a) *Ambia chrysogramma*, sp. n.

Head, thorax, and abdomen white, the last slightly tinged with brown on dorsum; antennæ with an ochreous tinge. Fore wing silvery white, the costa tinged with orange-yellow towards base; a small tuft of rufous scales below middle of costa with the orange-yellow antemedial and medial lines arising below it and rather diverging towards inner margin; a conical postmedial patch defined by orange-yellow from costa to vein 5, with a brown point on the line defining its outer side at costa; an orange-yellow subterminal line, excurved to submedian fold, where it is angled inwards, a fine yellow-brown line beyond it, incurved below vein 2, the terminal area tinged with yellow. Hind wing silvery white; a small orange-yellow discoidal spot; an orange-yellow postmedial line, excurved to vein 4, then bent inwards to origin of vein 2 and oblique to inner margin; an orange-yellow subterminal line, excurved to vein 2, then incurved, a fine yellow-brown line beyond it; the terminal area tinged with yellow.

Hab. SAMOA Is., Pago (*de la Garde*), 1 ♂, 1 ♀ type. *Exp.* 12 mm.

(9 b) *Ambia cymophoralis*, sp. n.

♂. Head white, the antennæ tinged with ochreous, the palpi yellow behind; thorax and abdomen white, the tegulæ with subdorsal orange-yellow stripes, the patagia orange-yellow above and the dorsum of thorax orange-yellow except the metathorax, the abdomen banded with orange-yellow; pectus, legs, and ventral

surface of abdomen white, the fore femora above and tibiae on inner side yellowish with some black at the femoro-tibial joint. Fore wing orange-yellow with a fulvous tinge; some white at base in and below the cell; an erect silvery-white subbasal band; a silvery-white band just before middle, defined on each side by dark brown below the cell, excurved below the costa and above inner margin and emitting a spur at discal fold to the white discoidal lunule defined by black except above; the medial part of costa white; a silvery-white wedge-shaped mark in discal fold before the post-medial band, which is silvery white defined on each side by dark brown, incurved below costa, then excurved to vein 3, below which it is angled inwards, then erect with its outer edge excurved at submedian fold; a silvery-white subterminal band from costa to vein 1, defined on each side by dark brown, strongly on outer side, its extremities at costa and above vein 1 dilated into spots, excurved between those points; cilia white, chequered with brown at apex and with orange-yellow at middle and tornus. Hind wing orange-yellow with a slight fulvous tinge, the base white; a silvery-white antemedial band from cell to inner margin connected with a silvery-white patch in end of cell with a black discoidal bar on its outer edge; a silvery-white postmedial band, excurved and defined on outer side by brown to vein 2, then incurved; a silvery-white subterminal band defined on each side by black from costa to vein 1, its extremities on costa and above vein 1 expanding into spots, excurved between those points; cilia white, chequered with red-brown towards apex and at middle.

Hab. LOUISIADE IS., St. Aignan I. (*Meek*), 3 ♂ type, Rossel I. (*Meek*), 1 ♀. *Exp.* 16-18 mm.

(16 a) *Ambia rufitincta*, sp. n.

♀. Head, thorax, and abdomen white suffused with rufous, the last slightly irrorated with dark brown towards base and strongly with black towards extremity; antennae white tinged with yellow; palpi white tinged with yellow and with some black above; pectus, legs, and ventral surface of abdomen yellowish white. Fore wing white suffused with rufous and slightly irrorated with brown; a faint inwardly oblique rufous antemedial line; a curved black medial line, rather diffused on inner side and incurved at median nervure; an oblique slightly curved blackish postmedial line from costa to vein 2 above tornus, defined on outer side by white; a fine brown terminal line from costa to vein 2. Hind wing white suffused with rufous and slightly irrorated with brown except on inner area; a patch of diffused black scales in and beyond end of cell; postmedial line black, oblique and defined on outer side by white to vein 4, then obsolete and retracted to beyond lower angle of cell, then curved and rather diffused to inner margin; a fine brown terminal line except toward tornus.

Hab. PERU, Cuzco Mts. (*Garlepp*), 1 ♀ type. *Exp.* 14 mm.

(17 a) *Ambia hemigrammalis*, sp. n.

♀. Head, thorax, and abdomen white mixed with fulvous yellow and irrorated with some black scales; palpi white banded with black; pectus, legs, and ventral surface of abdomen white, the fore tibiae banded with black. Fore wing white; a subbasal black bar from costa; an antemedial black line from costa to discal fold and some scales at inner margin; a broad oblique orange-yellow shade from below costa before the postmedial line to inner margin before middle, irrorated with some black scales and with black striæ on it on each side of the discocellulars; a strong oblique black postmedial line from costa to discal fold, then an incurved shade formed by blackish scales with the area beyond it orange-yellow; an orange-yellow bar from costa before apex, then a double curved black line filled in with silvery white; the terminal area orange-yellow, narrowing to a point below apex; cilia white, black at base at apex and with a black patch between veins 4 and 2. Hind wing white, the basal area irrorated with black and with a black patch at end of cell; the terminal half suffused with orange-yellow and slightly irrorated with brown; a dark brown shade between veins 7 and 2 before the indistinct double dark postmedial line filled in with white; a narrow white band defined by slight dark lines before the termen which is yellow, the band not extending to tornus; cilia white, dark brown at base from vein 4 to tornus.

Hab. PERU, Yungas de la Paz (*Seebold*), 1 ♀ type. *Exp.* 12 mm.

(17 b) *Ambia sufetulodes*, sp. n.

♀. Head, thorax, and abdomen white mixed with dark brown, the prothorax and patagia at middle with brown spots, the abdomen suffused with brown towards extremity, leaving white segmental lines; palpi and maxillary palpi white banded with black; pectus, legs, and ventral surface of abdomen white, the fore tibiae, spurs, and tarsi banded with black. Fore wing white, the basal and terminal areas suffused with brown, the medial area with broad brownish shade; a white subbasal band, defined on inner side by black; a white antemedial band, defined on each side by black and incurved below submedian fold; two semicircular white marks defined by black on medial part of costa, the first with black point at costa; a small round black discoidal spot; a postmedial white band defined on each side by black, excurved to vein 5, then incurved, expanding somewhat at costa; an oblique white streak from apex and a blackish line before termen excurved at middle; a dark terminal line except at the excision at discal fold; cilia white with some brown at apex and middle. Hind wing white, the terminal area suffused with brown, broadly towards costa and narrowing to tornus; some brown near base; a broad oblique

brown band from discal fold before the small blackish discoidal spot to inner margin before the postmedial line, with a white bar on it at inner margin; postmedial line black defined on outer side by white, incurved below discal fold, then excurved; a black line before termen; a black terminal line from apex to vein 3 except at the excision at discal fold, and black striae at veins 2 and 1; cilia white with some brown at apex and middle.

Hab. PERTU, R. Pacaya, 1 ♀ type. *Exp.* 14 mm.

(22 b) *Ambia fulvicolor*, sp. n.

♂. Head, thorax, and abdomen yellow suffused with fulvous, the last with subdorsal white segmental bands; frons and 3rd joint of palpi white; pectus, legs, and ventral surface of abdomen white tinged with fulvous. Fore wing yellow suffused with fulvous; an oblique subbasal silvery-white band from cell to inner margin, with some red-brown before it; some dark brown on costa before the antemedial silvery-white band, which is interrupted in the cell, oblique towards costa and below the cell and defined by red-brown; the cell suffused with red-brown except towards base; a fulvous lunule at end of cell defined by dark brown and with some white beyond it; the fovea above end of cell white defined by dark brown and with a silvery-white point above it on costa; some dark brown on costa before an oblique silvery-white postmedial band from costa to vein 4 and a triangular mark from vein 2 to inner margin, both defined on outer side by the dark brown postmedial line which is angled inwards at vein 2, the costa beyond it dark brown; a slightly sinuous dark brown subterminal line with a series of small silvery-white spots before it from below costa to inner margin, the hair on which is dark brown below it; cilia white mixed with some yellow and chequered with dark brown below apex and at veins 4, 3, 2. Hind wing yellow suffused with fulvous along median nerve and on terminal area, the base white; an oblique silvery-white antemedial band defined by dark red-brown; a fulvous discoidal spot defined by dark red-brown; postmedial line dark brown defined on inner side by a silvery-white band, slightly incurved below vein 4; a sinuous dark brown subterminal line defined on inner side by silvery-white spots, small to vein 5, then interrupted to just above vein 3, larger and more diffused below vein 3; cilia white mixed with some yellow, chequered with dark brown at apex and between veins 5 and 2.

Hab. BR. N. GUINEA, Kumusi R. (*Meek*), 1 ♂ type. *Exp.* 18 mm.

(23 b) *Ambia albiflavalis*, sp. n.

♂. Head, thorax, and abdomen white tinged with yellowish; antennae ochreous; frons yellow; palpi yellow with the 3rd joint white; pectus, legs, and ventral surface of abdomen white. Fore

wing silvery white; the base orange-yellow with oblique outer edge; an obliquely curved orange-yellow antemedial band; an orange-yellow band from end of cell to inner margin, the end of cell tinged with brown and the fovea above it with two brown points on its upper edge, a yellow patch with a white spot on it beyond it on costal area; an orange-yellow subterminal band defined at sides by brown, obliquely curved to vein 2, then bent outwards to tornus, giving off on inner side between veins 4 and 2 a yellowish fascia tinged with brown to lower end of cell; a pale brown terminal band. Hind wing silvery white; an orange-yellow antemedial band from cell to inner margin; a curved orange-yellow postmedial band defined by red-brown from costa to vein 1, its outer edge angled outwards at vein 4; a sinuous orange-yellow subterminal band defined by red-brown and ending at tornus, its outer edge excurved at discal fold to the narrow orange-yellow terminal band defined on inner side by a red-brown line and ending at submedian fold.

Hab. S. NIGERIA, Lagos (*Dudgeon*), 1 ♂ type. *Exp.* 14 mm.

(23f) *Ambia niveiplagalis*, sp. n.

♂. Head, thorax, and abdomen white mixed with red-brown and dark brown, the head with dark line between antennæ, the tegulæ dorsally and patagia at middle with white patches, the abdomen pale towards extremity and with white bands; antennæ yellowish ringed with black; palpi pale red-brown, the 3rd joint white with red-brown band towards extremity; pectus, legs, and ventral surface of abdomen white, the fore legs tinged with red-brown, the abdomen with faint brownish bands. Fore wing yellowish tinged with rufous and irrorated with dark brown; an inwardly oblique blackish antemedial line, excurved above inner margin and with a dark shade before it from subcostal nervure to inner margin; an oblique slightly sinuous blackish medial line with a white striga before it in and below the cell, where it is conjoined to a silvery-white patch below the submedian fold extending to inner margin and to the antemedial line; a quadrate silvery-white spot beyond the cell defined by blackish and a quadrate patch from vein 2 to inner margin defined by blackish at sides, the fovea above end of cell white; an oblique elliptical silvery-white patch defined by blackish from costa, to which it narrows, to vein 4; an apical white spot, then a curved series of white spots defined by blackish, minute to vein 3, the spots below veins 3 and 2 larger; cilia red-brown mixed with white. Hind wing yellowish tinged with rufous and irrorated with dark brown; a broad subbasal silvery-white band defined by dark brown and with red-brown spot on it at inner margin; a rather lunulate silvery-white spot beyond the cell defined by dark brown; a rounded postmedial silvery-white patch defined by dark brown from costa to vein 4, a spot below vein 3, and a curved band from vein 2 to above tornus; a triangular silvery-

white apical spot, small conjoined subterminal spots above and below vein 4 and larger rather wedge-shaped spots below veins 3 and 2; cilia reddish brown mixed with some white.

Hab. PERU, Carabaya, Oconeque (*Ockenden*), 1 ♂ type. *Exp.* 20 mm.

(30 b) *Ambia melanistis*, sp. n.

♀. Head, thorax, and abdomen black-brown mixed with some white; pectus, legs, and ventral surface of abdomen white. Fore wing very dark red-brown with a blackish tinge; an antemedial white point on costa and medial bar from costa; a slightly ex-curved punctiform white postmedial line from costa to discal fold, the line then almost obsolete and incurved below vein 4, with white points above and below vein 1, a metallic silvery patch before it between veins 3 and 1 and a small spot at middle of inner margin; a curved punctiform white subterminal line; cilia whitish. Hind wing very dark red-brown with a blackish tinge; the basal part of costa white; an antemedial white point on inner margin; a small metallic silvery spot beyond the cell; an oblique postmedial white band from costa to vein 4 and a minute spot above tornus; a curved white subterminal line from costa to discal fold and a series of striae between discal fold and vein 1; the termen more rufous; cilia white.

Hab. FORMOSA, Kanshrei (*Wileman*), 1 ♀ type. *Exp.* 12 mm.

[(38 a) *Ambia argentistriata*, sp. n.

Fore wing of male on underside with large costal fold from before middle to near apex; hind wing in both sexes on upperside with tuft of long spatulate hairs below end of cell.

♂. Head, thorax, and abdomen yellow, the tegulae and patagia with scarlet streaks, the abdomen dorsally suffused with rufous; palpi tinged with rufous; pectus, legs, and ventral surface of abdomen white tinged with rufous. Fore wing orange-yellow; the basal area suffused with scarlet, irrorated with a few black scales and with some silver scales below costa; a curved scarlet antemedial line; the medial area except towards costa and the postmedial area below vein 4 with a silvery gloss finely striated with dark brown; a scarlet line from upper angle of cell, oblique to vein 3, then erect, with a yellow streak tinged with scarlet in submedian fold to the antemedial line and beyond it on the silvery area, the area beyond the line, except the silvery area, yellow tinged with scarlet with brilliant silver streaks defined by black scales in the interspaces of the postmedial area from below costa to vein 4 and a streak of black scales below vein 4, its extremity connected by a line formed by black scales with the inner margin and incurved at submedian fold; a curved brilliant silver line before termen and a terminal series of black striae; cilia with brown mixed

except at base. Hind wing white; a triangular area from origin of vein 2 to termen between discal fold and vein 2 orange-yellow; the tuft of scales below end of cell black; a curved scarlet post-medial line between veins 5 and 2; a brilliant silver line before termen from costa to vein 5, then a series of small brilliant silver spots with black points before and beyond them on each side of veins 4 to 2; the termen narrowly orange-yellow to apex; cilia white, their bases orange-yellow with a brown line at base to vein 2.

Ab. 1. Head, thorax, abdomen, fore wing, and the triangular patch on hind wing yellowish suffused with rufous, the scarlet markings replaced by rufous, the fore wing with silvery marks before the antemedial line in the interspaces.

Hab. W. COLOMBIA, Jiminez, 1 ♂ type, W. slopes, 1 ♂. *Exp.* 20 mm.

(38 c) *Ambia phæomerilis*, sp. n.

♀. Head, thorax, and abdomen grey-white mixed with brown; palpi, pectus, legs, and ventral surface of abdomen white tinged with brown, the tarsi dark brown ringed with white. Fore wing grey-white thickly irrorated with brown; an indistinct brown medial line defined on inner side by whitish, excurved to median nervure, then sinuous; a slight dark discoidal spot; a large patch of dark brown suffusion from costa to vein 2 before the postmedial line which is white slightly defined on outer side by brown and excurved from costa to vein 2 near termen, then almost obsolete and retracted to below the angle of cell, then more distinct, defined on inner side by brown and waved to inner margin; a series of dark striæ before termen from below apex to above tornus. Hind wing white thickly irrorated with dark brown, the base, cell, and costal area to near apex white; the tuft of hairs below end of cell black-brown; subterminal line white, excurved to vein 2, then sinuous; a series of ocellate black spots on termen from apex to submedian fold, defined on inner side by white with a fine sinuous dark line before it and with slight orange marks between them, the spots from apex to discal fold minute, then larger and with a black line beyond them on termen; cilia white, metallic silver at base.

Hab. BOLIVIA, Yungas de la Paz (*Seebold*), 1 ♀ type. *Exp.* 22 mm.

(4 a) *Oligostigma centrimacula*, sp. n.

Antennæ of male fringed with hair above at one-third from base; hind tibiæ fringed with hair below towards base.

Head and thorax white, the head tinged with rufous behind, the patagia with some black-brown on outer edge; abdomen white, suffused with pale yellow except towards extremity; antennæ tinged with rufous; palpi with some black on extremity of 2nd joint behind; pectus, legs, and ventral surface of abdomen white,

the fore femora above and tibiæ on inner side black, the tarsi ringed with black. Fore wing orange-yellow, the costa red-brown to end of cell; a white fascia in the cell from before middle extending to well beyond the cell and with the dark cupreous red-brown discoidal spot on it; a curved silvery-white subterminal band defined on outer side by a black line from below costa to submedian fold in which it is bent inwards as a streak; a fine brown terminal line; cilia white. Hind wing with the basal half white with oblique outer edge defined by a strong black-brown line between discal and submedian folds; the terminal half orange-yellow with oblique silvery-white subterminal bar from costa to vein 6 and subterminal silvery-white band defined by dark brown lines between veins 4 and 1; four minute rather quadrate black spots on termen between vein 5 and submedian fold; cilia white, metallic silvery at base beyond the spots.

Hab. QUEENSLAND, Kuranda (*Dodd*), 1 ♂, 1 ♀ type. *Exp.* 16 mm.

(1c) *Oligostigma peruviansis*, sp. n.

Head and thorax dark brown mixed with white, the patagia with white streak on upper edge towards base, the metathorax edged with white; abdomen brown with white segmental bands; antennæ white ringed with brown; palpi brown with some white in front and at tips; pectus, legs, and ventral surface of abdomen white, the legs tinged with brown, the abdomen tinged with brown except towards base and with white segmental lines. Fore wing cupreous brown mixed with some ochreous; an obliquely curved somewhat dentate blackish subbasal line defined on each side by slight white marks except towards costa; antemedial line white defined on each side by dark brown, oblique to median nervure, angled outwards at median nervure and submedian fold, then very oblique, forked white streaks beyond it at submedian fold; the medial area with white spots on costa, in the cell, and at inner margin; a white medial line, oblique to submedian fold, then incurved; a rather lunulate black discoidal spot defined by ochreous; the postmedial area with a loop formed by sinuous white lines from costa to vein 2, enclosing a white band to vein 4 rather constricted below costa; a narrow white band from below costa to vein 1, its inner edge irregular and incurved at discal and submedian folds before an orange-yellow terminal band defined on inner side by a black line and on outer by black striæ on termen; cilia white with a brown line near base and the tips with brown mixed. Hind wing cupreous brown; a sinuous white subbasal band; a white antemedial line; a broad white medial band; postmedial line white, angled inwards below costa and outwards at vein 4, then bent inwards and sinuous to inner margin; a white band with sinuous inner edge from discal to submedian fold before the terminal orange-yellow band defined on inner side by a black line; a series of five small ocellate black

spots on termen from vein 7 to below 4, the spots below veins 7 and 5 double, each with a white point on them; cilia white mixed with brown and with a brown line near base.

Ab. 1. Fore wing without the white in end of cell or in the postmedial loop.

Hab. PERT, Carabaya, R. Huacamayo, La Union (*Ockenden*), 1 ♂, 1 ♀, La Oroya (*Ockenden*), 2 ♂, 3 ♀ type. *Exp.*, ♂ 22-26, ♀ 32-38 mm.

(1 d) *Oligostigma rufiterminalis*, sp. n.

♀. Head and thorax greyish suffused with red-brown; abdomen whitish tinged with red-brown and slightly irrorated with black; palpi white tinged with red-brown and irrorated with black; pectus, legs, and ventral surface of abdomen whitish, the legs tinged with red-brown, the fore tibiae with white band at middle and black band at extremity. Fore wing greyish suffused with red-brown; blackish points near base in and below the cell; a rather diffused black antemedial line, excurved to below vein 1 and bent inwards to inner margin; the medial area with rufous streaks irrorated with black in discal and submedian folds; a somewhat inwardly oblique black medial line, slightly excurved below costa; an elliptical rufous discoidal spot defined by black; postmedial line black slightly defined on outer side by whitish, very slightly waved towards costa, then excurved to vein 2, where it is strongly angled inwards, then oblique; a narrow silvery-white band from below costa to vein 1, above which it forms a small spot with a deeper red-brown shade before it, before the narrow orange-yellow terminal band defined on inner side by a black line; cilia whitish tinged with red-brown. Hind wing whitish tinged with red-brown, the area beyond the postmedial line rufous; a curved black subbasal line; a round yellow discoidal spot defined by black; postmedial line black, excurved to vein 3, then incurved; a narrow silvery-white subterminal band defined on outer side by a black line with some yellow beyond it; the termen narrowly whitish between veins 6 and 2, with four minute black spots on it; cilia whitish tinged with red-brown.

Hab. MADAGASCAR, 1 ♀ type. *Exp.* 24 mm.

(12 a) *Oligostigma piperitalis*, sp. n.

♀. Head and thorax grey tinged with rufous and irrorated with dark brown; abdomen white with diffused rufous bands; antennæ dark brown, pale red-brown towards base; palpi red-brown; pectus, legs, and ventral surface of abdomen white, the fore and mid legs tinged with red-brown. Fore wing grey tinged with rufous and thickly irrorated with dark brown; a short blackish streak in middle of cell and small rather diffused discoidal spot; a narrow white band from below costa to vein 1 before the fulvous-yellow

terminal band defined on inner side by a fine dark line; a fine dark terminal line; cilia whitish tinged with rufous and with a fine dark line near base. Hind wing pale rufous irrorated with dark brown; the base white; a narrow oblique white antemedial band, diffused outwards at costa; a small blackish discoidal spot; a narrow white postmedial band excurved to vein 4, then incurved; a narrow white band defined on inner side by diffused blackish and on outer by a black line from below costa to inner margin before the fulvous-yellow terminal band; a white terminal line with minute black spots on termen below veins 7, 5, 4, 3, defined on inner side by a black line which is slightly waved before the spots, the termen with a fine black line at apex and below the spots; cilia white faintly tinged with brown.

Hab. N. NIGERIA, Zungeru (*Macfie*), 1 ♀ type. *Exp.* 18 mm.

(18 b) *Oligostigma flaviobalis*, sp. n.

♀. Head, thorax, and abdomen white, the shoulders with some rufous, the metathorax yellow behind; palpi and maxillary palpi banded with rufous; fore tibiae tinged with rufous with a white spot at middle. Fore wing silvery white, the costa tinged with rufous at base, then with yellow to beyond middle, the inner margin with a pale yellow patch before middle; a small rufous spot in upper part of middle of cell; a yellow discoidal spot defined by rufous scales; a silvery-white subterminal band defined by pale brown lines with diffused pale yellow before it and the terminal area beyond it pale yellow; cilia white tinged with rufous. Hind wing white; the subbasal area pale yellow, diffused on inner side and defined on outer by a pale brown line; a pale brown postmedial line, excurved below costa, the area beyond it pale yellow with a narrow silvery-white subterminal band on it; the termen with minute black bars at veins 6 to 2; cilia white tinged with rufous.

Hab. MADAGASCAR, Betsileo (*Cowan*), 1 ♀ type. *Exp.* 22 mm.

(23 b) *Oligostigma leucomma*, sp. n.

♂. Head and thorax fulvous yellow mixed with white; abdomen white suffused with fulvous yellow except at base; palpi white at tips; pectus, legs, and ventral surface of abdomen white suffused with fulvous yellow. Fore wing white, the costal and terminal areas suffused with fulvous yellow; black subbasal striæ above and below vein 1; an antemedial fulvous-yellow band, defined on outer side by some dark scales below the cell; a slightly waved blackish medial line somewhat excurved below the costa; the outer half of medial area fulvous yellow, suffused with blackish below the cell; postmedial line blackish, defined on outer side by white to vein 4 and with a white spot before it beyond the cell, slightly incurved below costa and excurved at middle, at vein 4 bent inwards to lower angle of cell, then waved to inner margin; a black subterminal line

defined on inner side by a narrow white band, incurved from costa to discal fold and below vein 2, excurved at middle; a black terminal line; cilia white, black at apex and middle. Hind wing white, the terminal area suffused with fulvous yellow; a curved yellow antemedial line with some dark scales on it below the cell; a blackish discoidal bar; postmedial line fulvous yellow, excurved to vein 4, then bent inwards to lower angle of cell, then with some dark scales on it and excurved above inner margin; a slightly sinuous black subterminal line with a narrow white band on its inner side, excurved at middle; cilia white with a blackish line near base and some dark scales at tips to vein 2.

♀. Head, thorax, abdomen, and fore wing almost entirely fulvous yellow, the last without the white spot before the postmedial line and the white beyond the postmedial line and before the subterminal line reduced.

Hab. QUEENSLAND, Stradbroke I. (Turner), 3 ♂, 1 ♀ type. *Exp.* 16-18 mm.

(23 c) *Oligostigma fulvicolor*, sp. n.

♂. Head, thorax, and abdomen fulvous, the last with some yellow mixed; frons white; tarsi white at base. Fore wing fulvous mixed with some yellow; a whitish antemedial spot on costa with a slight dark streak below it; an inwardly oblique slightly sinuous silvery-white medial band defined on each side by blackish except at costa and with a slight dark streak beyond it below costa to an elongate white spot defined by dark scales above end of cell; a white point defined by dark scales at upper angle of cell and a slight oblique dark streak below lower angle with a yellow mark above it extending to the postmedial narrow silvery-white band defined on each side by black-brown except at costa, obliquely curved to vein 2, then incurved; a subterminal series of short dark streaks with some whitish on the streaks above and below vein 2; cilia dark brown. Hind wing fulvous; a narrow slightly sinuous silvery-white antemedial band defined on each side by black-brown; a similar postmedial band, obliquely curved to vein 1, then bent outwards to tornus; a subterminal series of slight rather wedge-shaped dark marks with some whitish in centres; cilia dark brown.

Hab. PERTH, Carabaya, Oconeque (Ockenden), 3 ♂ type. *Exp.* 34-38 mm.

(28 b) *Oligostigma flavipictalis*, sp. n.

♀. Head, thorax, and abdomen white, the hind tarsi tinged with yellow on inner side. Fore wing silvery white; a golden-yellow patch at base of costa, slightly defined on outer side by brown; a curved golden-yellow antemedial band, slightly defined on each side by brown towards costa, where it is somewhat dilated;

a slight brown discoidal striga; an orange-yellow patch below end of cell in submedian interspace, its inner edge connected by a bar with inner margin and its outer edge defined by a slight brown line continued to inner margin; an oblique orange-yellow mark on costa above end of cell defined on inner side by a brown striga; an orange-yellow postmedial patch below costa with which its inner edge is connected by an oblique bar, defined at sides by slight brown lines; a curved orange-yellow subterminal band from costa to below vein 4 where it is bent inwards, its inner edge defined by a blackish line to discal fold and with a slight oblique brownish line from the inner side of its recurved part to tornus; a narrow orange-yellow terminal band defined on inner side by a fine black line, curved inwards at tornus. Hind wing silvery white; a curved orange-yellow subbasal band defined on outer side by a slight brown line; an orange-yellow medial band defined by slight brown lines, its outer edge forming a hook at vein 4, then incurved; an orange-yellow subterminal band defined by fine black lines, its inner edge strongly incurved from below vein 4 to submedian fold; the termen narrowly white with a fine terminal black line; cilia chequered yellow and white with some blackish scales at tips.

Hab. SINGAPORE (*Meade-Waldo*), 1 ♀ type. *Exp.* 14 mm.

(13 a) *Aulacodes hemimelæna*, sp. n.

♀. Head and thorax black-brown; abdomen yellowish tinged with black-brown and with some white at base; pectus white; legs and ventral surface of abdomen yellow, the fore legs tinged with red-brown, the fore femora black-brown above. Fore wing black-brown; a curved silvery-white band from below costa to vein 1 before the golden-yellow terminal band defined on inner side by black striae and on outer by a terminal series of black points and striga at submedian interspace; cilia silvery white. Hind wing white with a black-brown patch at base, the terminal area broadly golden yellow defined on inner side by a black line between discal and submedian folds; a minute ocellate white spot defined by black on termen at discal fold, then three minute black spots with some red between them to vein 2; cilia silvery white, brown at base beyond the spots.

Hab. PHILIPPINES, Manila (*Ledyard*), 1 ♀ type. *Exp.* 18 mm.

(23 b) *Aulacodes quadriplagiata*, sp. n.

♂. Head and thorax fulvous yellow; abdomen white tinged with yellow; palpi with some brown at side of 2nd joint; legs yellow, the fore tibiae with dark brown band at extremities, the tarsi ringed with brown; pectus and ventral surface of abdomen white. Fore wing with the basal half black-brown except the costal area which is fulvous yellow at base, then white, and a conical white ante-

medial spot at inner margin; a medial white band leaving the costal yellow; a semicircular deep chocolate-brown postmedial patch from below costa to vein 3 defined on outer side and below by a curved silvery-white band and shading to red-brown at costa before the white band; a terminal yellow band defined on inner side by a black line to submedian fold, the yellow band bent inwards on inner area to near the basal black-brown area; a terminal series of black points and small spot below apex; cilia silvery white, tinged with brown at apex. Hind wing silvery white, the terminal area broadly bright yellow, extending on inner area to near base; the white area defined by a curved black line between discal and submedian folds; subterminal black striæ above and below vein 2, then a curved silvery-white line to above termen; a curved silvery-white line from costa before apex to termen at discal fold; minute silvery-white ocellate spots defined by black and with black points on their outer edge above and below vein 4 before termen; a minute black spot below vein 3 and striga below vein 2; cilia silvery white tinged with red-brown at base.

♀. Fore wing with the basal half chocolate-brown, its upper edge indented by an elongate white mark in the cell and with white streak below it on inner margin, the whole costal area above it yellow, the postmedial patch red-brown and extending to submedian fold.

Hab. D'ENTRECASTEAUX IS., Goodenough I. (*Meek*), 1 ♂, 2 ♀ type. *Exp.* 20–26 mm.

(24a) *Aulacodes costifascialis*, sp. n.

Hind tibiæ of male rather curved downwards and fringed with hair throughout.

Head, thorax, and abdomen white suffused with yellow, the abdomen yellower except at base; palpi red-brown towards tips; fore legs with the femora black-brown above, the tibiæ with black-brown band at extremity. Fore wing golden yellow; a rufous fascia on costa to end of cell, where it expands into a triangular patch to lower angle of cell, a silvery-white fascia below it in and just below the cell; a wedge-shaped silvery-white patch beyond the cell from below costa to vein 2, defined by slight fuscous lines; a curved silvery-white subterminal band from costa to above vein 1, where it is somewhat bifid, defined by fine black lines except at costa; a terminal series of black points and striga in submedian interspace; cilia silvery white. Hind wing silvery white, the inner and terminal areas broadly golden yellow, the white area defined by an oblique sinuous black postmedial line from vein 6 to submedian fold; an obliquely curved silvery-white line from costa before apex to termen at discal fold; four minute ocellate silvery-white spots before termen between vein 5 and submedian fold, the two upper spots with black points on their outer edges, the two lower with black points beyond them, some orange-red on termen

between the spots and two minute black points above them above vein 5; cilia silvery white with some brown at base beyond the spots.

Hab. D'ENTRECASTEAUX IS., Goodenough I. (*Meek*), 2 ♂, 4 ♀ type; BISMARCK ARCH., Rook I. (*Meek*), 2 ♂, 1 ♀. *Exp.* 20-24 mm.

(24b) *Aulacodes nigriplagialis*, sp. n.

Eristena trigonalis, ab. 1, Hmps., A. M. N. H. (7) xviii. p. 390 (1906).

Hind tibiæ of male slightly fringed with hair above towards extremity.

Head, thorax, and abdomen orange-yellow, the head and tegulæ with some brown mixed; palpi irrorated with dark brown; pectus and ventral surface of abdomen white suffused with orange-yellow, legs orange-yellow, the fore tibiæ with dark brown band at extremity. Fore wing orange-yellow; a very dark red-brown fascia on costa to end of cell, the end of cell below it white; a large conical very dark red-brown patch tinged with blackish from postmedial part of costa to vein 2, defined on inner side by a curved dark line met at vein 2 by another faint curved dark line traversing the patch and with a slight greyish tinge between them, a silvery-white band defining the outer edge of the patch defined on outer side by a fine curved black line; a terminal series of black points, forming a minute spot below apex and striga at submedian interspace; cilia silvery white. Hind wing orange-yellow, the costal area whitish to beyond middle; an oblique black postmedial line between discal and submedian folds; an oblique silvery-white line from costa before apex to termen at discal fold; four small black spots before termen between discal and submedian folds, the two upper spots defined on inner side by silvery white, with a wavy black line before them diverging obliquely below the 2nd spot, some orange-red on termen between the spots; cilia silvery white, brown at base beyond the spots.

Hab. DUTCH N. GUINEA, Fak-fak (*Pratt*), 1 ♂ type, Kapaur (*Doherty*), 1 ♀. *Exp.* 18 mm.

(24c) *Aulacodes dolichoplagia*, sp. n.

♂. Head white, the frons suffused with golden yellow, the back of head with some brown; thorax silvery white, the shoulders, tips of patagia, and metathorax dark brown; abdomen golden yellow, white at base; antennæ yellow; palpi red-brown, white at base; pectus, legs, and ventral surface of abdomen white, the legs tinged with yellow, the fore femora above and tibiæ at extremities dark brown. Fore wing dark brown; a silvery-white fascia below base of cell conjoined to a patch in end of cell; a large oblique conical silvery-white patch from postmedial part of costa to below vein 3 beyond the cell; a series of white striæ before the narrow orange-yellow terminal band defined on inner side by a black line; a

terminal series of black points; cilia brown at base, silvery white at tips. Hind wing silvery white; a dark brown patch at base; the terminal area golden yellow, expanding on inner area to middle, defined on inner side by a series of dark points from below costa to vein 2 and a striga at vein 1; a series of silvery-white marks before termen from below costa to submedian fold, defined by blackish, the spot below costa round, the others elongate except the small spot below vein 5; minute terminal black spots above and below vein 4 and slight striae towards apex and between veins 3 and 1; cilia silvery white with some brown at apex and a brown line through them from vein 5 to near tornus.

Hab. DUTCH N. GUINEA, Fak-fak (*Pratt*), 1 ♂ type. *Exp.* 24 mm.

[To be continued.]

XLVI.—*Descriptions and Records of Bees.*—LXXV.

By T. D. A. COCKERELL, University of Colorado.

Xylocopa draconis, sp. n.

♂.—Length about 25 mm., anterior wings 18.5 mm.

Black, without any metallic tint; thorax thickly covered (except bare space on disc) with reddish-ochreous velvety hair; abdomen not banded. Eyes extremely large, converging above; mandibles bidentate, with a yellow basal patch; tubercle of labrum small; clypeus ivory-colour, more or less brownish, with a pair of black spots, the surface of clypeus closely punctured, but an impunctate median ridge; supraclypeal area almost pallid; ocelli large, far down on front; face and front with red-brown hair, darkest around ocelli; top of head and cheeks with reddish-ochreous hair; anterior femora swollen, without hair below; anterior and middle tibiae with bright fulvous hair on outer side, reddish on inner, and sooty behind; anterior tarsi similarly coloured, but from middle of basitarsus on there is creamy-white hair on under side posteriorly, beneath the sooty, and on apical part of basitarsus anteriorly and beneath the red is very bright; middle tarsi with reddish-black hair above and behind, but red beneath; hind femora broad, basally keeled beneath, with a pustuliform swelling on the side of the keel; hind tibiae with a conspicuous apical lobe, much broader than long, on inner side; hind basitarsi with ochreous hair in front, black above and red behind, the